PROFESSIONAL EXPERIENCE

4/89 to present: Assistant Director

Radiation Protection Programs

New Jersey Department of Environmental Protection

Trenton, New Jersey 08625-0415

Direct the activities of the Radiation Protection Program, whose objective is to protect the public and the environment against unnecessary radiation exposure from natural and man-made sources. Three bureaus comprise the program, which encompasses such diverse activities as registration, licensing and inspection of radiation sources, certification of technologists, radon public awareness, certification of radon testing and mitigation firms, low level radioactive waste siting issues, nuclear emergency response, oversight of nuclear power plant activities for environmental releases, and non-ionizing radiation. There are 65 positions in the program, and a budget of \$5.5 million dollars.

6/88 to 4/89: Chief

Bureau of Hazardous Substances Information

New Jersey Department of Environmental Protection

Trenton, New Jersey 08625

Managed the operations of the Bureau charged with implementation of New Jersey's Community Right-to-Know program. Operations included surveying the regulated community about hazardous substances use, storage and release, developing appropriate computer software to manage the information, pursuing enforcement action against non-compliance, making the information available to the general public and publishing an annual report. Interfaced with members of the regulated community, researchers, government officials, and the general public. Oversight of budget of \$1.2 million, employed 20 individuals.

EDUCATION

Completed levels I, II, & III of the Certified Public Manager's Course.

- Ph.D. Environmental Science, Rutgers University
 "Using the Acoustic Reflex to Identify Individuals
 Susceptible to Noise-Induced Hearing Loss".
- M.S. Environmental Science, Rutgers University
- B.S. Environmental Science, Cook College, New Brunswick, New Jersey

PUBLICATIONS AND PRESENTATIONS

"Regulatory Issues in Interventional Procedures: A State Perspective," American Association of Physicists in Medicine, Medical Physics Monograph No. 28, pp. 243-261, 2002 Summer School Proceedings, McGill University, Montreal, Canada.

"How do regulations integrate scientific principles?" presented at the President's Symposium,

- American Association of Physicists in Medicine Annual meeting, July 15, 2002, Montreal, Canada.
- "Management of Terrorist Events Involving Radioactive Material", presented to the New Jersey State Emergency Response Commission, June 25, 2002, Trenton, NJ.
- "Update on New Jersey's Quality Assurance Requirements for X-ray Facilities", presented to the Conference of Radiation Control Program Directors, Inc., May 8, 2002, Madison, WI.
- "Public Involvement in Radiation Control Programs", presented to the Conference of Radiation Control Program Directors, Inc., May 7, 2002, Madison, WI.
- "Highway Route Control Shipments and their susceptibility to terrorist activities", presented to the Nuclear Regulatory Commission/Federal Emergency Management Agency scheduling conference, December 12, 2001, Atlantic City, NJ.
- "Tabletop demonstration of the Return and Recovery Matrix", presented at the Harvard School of Public Health short course on radiological emergency preparedness, August 16, 2001.
- "Implementation of a Regulatory Requirement for Diagnostic Radiology Quality Assurance a State Perspective", presented at the American Association for Physicists in Medicine annual conference, July 24, 2001, Mary E. Moore, co-author, Salt Lake City, Utah.
- "Qualifications to Practice Medical Physics and the Development of Regulations", presented at the American College of Medical Physics Professional Symposium, June 6, 2001, Hershey, Pennsylvania.
- "Preliminary Results from Implementation of Regulatory Requirements for Quality Assurance for X-ray Facilities", presented at the Conference of Radiation Control Program Directors, May 1, 2001, Anthony McMahon, co-author, Anchorage, Alaska.
- "Return and Recovery Matrix", presented at the 11th annual National Radiological Emergency Preparedness Conference, April 3, 2001, Nicholas DePierro and Patrick Mulligan, co-authors, Nashville, Tennessee.
- "Risk Informed Activities Vision for the Future", presented at the Nuclear Regulatory Commission's Regulatory Information Conference, March 14, 2001, Washington, DC.
- "Significance Determination Process" presented at the Nuclear Regulatory Commission's Regulatory Information Conference, March 14, 2001, Washington, DC.
- "Radiation Risks of High-Dose Fluoroscopy", Journal of the New Jersey Medical Society, April, 2000, with Julie K. Timins, MD, FACR, co-author.
- "Nuclear Power Plant and X-ray Program Redesign Lessons Learned", presented at the annual meeting of the Conference of Radiation Control Program Directors, May 15, 2000, Tampa, Florida, with Anthony McMahon and Kent Tosch, co-authors.
- "Demonstration Project for Reduced Inspection Frequency under the Mammography Quality Standards Act", presented at the Mammography Continuing Education Program, May 14, 2000, Tampa, Florida, with Kathleen Kaufman, co-author.
- "Perception as Reality: Will the Public Maintain Confidence in Nuclear Regulatory Effectiveness as Resources for Oversight Diminish?", presented to the OECD Nuclear Energy Agency, June 21, 1999, Paris, France.
- "Linear Non-Threshold Regulation?", presented at the annual meeting of the Conference of Radiation Control Program Directors, May 12, 1999, Louisville, KY.

"Salem Nuclear Power Station Ingestion Pathway Exercise – a fully integrated state/federal response", presented at the Harvard School of Public Health, August 19, 1998.

Panelist, "Workshop Addressing the Similarities and Differences in Chemical and Radiation Risk Management" June 8, 1998, sponsored by Environmental Law Institute and Johns Hopkins University.

"Accomplishments of the CRCPD – Report of the Chairman", Plenary session of the Conference of Radiation Control Program Directors annual meeting, May 17, 1998

"Partnerships between state regulators and the American Association of Physicists in Medicine", opening remarks at the symposium, May 15, 1998.

"Partnerships between state regulators and the American Society for Radon Scientists and Technicians", National Radon Meeting, November 5, 1998.

"Partnerships between state regulators and the manufacturers of x-ray equipment", National Electrical Manufacturers Association annual meeting, September 29, 1998.

"Strategic Planning for the CRCPD at the Crossroads", Plenary session of the Conference of Radiation Control Program Directors annual meeting, April 27, 1997

"State's View of the Memorandum of Understanding between the Nuclear Regulatory Commission and the Environmental Protection Agency", Plenary session of the Conference of Radiation Control Program Directors annual meeting, May 17, 1993.

"Electromagnetic Fields from Transformers Located within Buildings", given at the Conference of Radiation Control Program Directors annual meeting, May 26, 1992.

"Community Right-to-Know Annual Report, 1989", presented at the public hearing, March 15, 1989.

"Development and Evaluation of an Acoustic Reflex Test for Identifying Individuals Susceptible to Noise-Induced Hearing Loss", presented at the 1986 Air Pollution Control Association annual conference.

"Safety for Supervisors", edited and updated a manual for in-house training of supervisors at the Port Authority.

Hearing Conservation Program", wrote documents for the Port Authority as required under the Occupational Safety and Health Act.

"Community Noise control", edited a manual (wrote several chapters) to accompany a three-day course for health officials, police, and planners.

Community Noise Descriptors" (Master's paper), presented at the 1983 Air Pollution Control Association annual conference.

"Development of a Community Noise Control Curriculum", presented at the 1981 air Pollution Control Association annual conference.

PROFESSIONAL SOCIETY MEMBERSHIP

Conference of Radiation Control Program Directors, Chairman, 1997-1998, Board of Directors, 1992-1995 - Chair of the Environmental Nuclear Council, - Chair, Transportation Committee, 1991-1993, Liaison to the American College of Radiology, 1998 – present, Liaison to the American Association of Physicists in Medicine, 1998 – present, Mammography Inspection Frequency Task Group, Chair, 1999 – 2001, Committee on Public Information on Radiation Protection, Chair, 2001 to present.

National Council on Radiation Protection and Measurement, Board of Directors, elected 2002, Council member elected in 2001, member of SC91-3, Medical Radiation Exposure of the U.S. Population with Emphasis on Radiation exposure of the Female Breast.

Health Physics Society, National and New Jersey Chapter

American Association of Physicists in Medicine, Associate Member

American College of Radiology, Committee on Government and Public Relations, Committee on Radiation Units, Standards, and Protection (Commission on Medical Physics), 1999 – 2001.

National Association of Noise Control Officials, Board of Directors, 1982-1985

Sigma Xi, The Scientific Research Society

PUBLIC SERVICE

Science Advisory Board, Radiation Advisory Committee, Environmental Protection Agency, 1998 – present.

Technical Electronic Products Radiation Safety Standards Committee for the Food and Drug Administration, 1997-1999, 2002-2005.

Commissioner's representative on the Commission on Radiation Protection, 1989 – present.

Executive Director, New Jersey Low- Level Radioactive Waste Disposal Facility Siting Board

Commissioner's designated State Liaison Officer to the Nuclear Regulatory Commission

State representative to the Interagency Steering Committee on Radiation Standards, 1997-2002

"States as Certifiers" Committee for the implementation of the Mammography Quality Standards Act

Invited participant, "Workshop Addressing the Similarities and Differences in Chemical and Radiation Risk Management" June 8-9, 1998, sponsored by the Environmental Law Institute and Johns-Hopkins University.

HONORS

State of New Jersey, Professional Achievement Award, 2000, 2001

Gerald S. Parker Award, 2000 (highest award of the Conference of Radiation Control Program Directors)

NJ Department of Environmental Protection Constituent Service Recognition, October 4, 2000, in recognition of the excellent constituent service provided by the X-ray Inspection Compliance Guidance and in support of DEP's Open and Effective Government Goal.

TESTIMONY

Comments on the Revised Oversight Program for Nuclear Power Plants, hearing before the U.S.

Nuclear Regulatory Commission, Initial Implementation Evaluation Panel, January 23, 2001.

Comments on the Revised Oversight Program for Nuclear Power Plants, hearing before the U.S. Nuclear Regulatory Commission, March 9, 2000.

Comments on Generally Licensed Device Draft Regulation and the Orphan Source Recovery Program, hearing before the U.S. Nuclear Regulatory Commission, April 16, 1999.

Improving Nuclear Regulatory Commission's control over, and licensees' accountability for, generally and specifically licensed devices, hearing before the U.S. Nuclear Regulatory Commission, January 21, 1998.

Radon Disclosure and Awareness Act, joint hearing before the United States House of Representatives Subcommittee on Transportation and Hazardous Materials and the Subcommittee on Health and the Environment, July 14, 1993

Indoor Radon Abatement Reauthorization Act of 1993, hearing before the United States Senate Committee on Environment and Public Works, Subcommittee on Clean Air and Nuclear Regulations, May 25, 1993

Radon Awareness and Disclosure, hearing before the United States House of Representatives Subcommittee on Transportation and Hazardous Materials, June 3, 1992